

IN THE CLAIMS:

Please amend Claims 1 and 4, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

Claim 1 (currently amended): An image pickup apparatus, comprising:

a plurality of ~~pixel units~~ pixels each including a first sensitive area corresponding to a first light flux of light fluxes respectively ~~[[from]]~~ corresponding to different areas ~~dividing~~ of an exit pupil area of an imaging optical system and a second sensitive area corresponding to a second light flux of the light fluxes, ~~different from the first light flux~~ so that two photoelectric conversion portions are formed in each pixel based on the first and second sensitive areas; and

an output unit, which outputs a first electric signal and a second electric signal, to detect a phase difference between the first electric signal and the second electric signal~~[[,]]~~ from ~~[[said]]~~ the plurality of ~~pixel units~~ pixels,

wherein the first sensitive area and the second sensitive area are arranged so that each of the first electric signal and the second electric signal, output by ~~[[said]]~~ the output unit, includes signals generated in the first sensitive area and the second sensitive area.

Claim 2 (withdrawn): An apparatus according to claim 1, wherein ~~[[said]]~~ the plurality of ~~pixel units~~ pixels includes at least two types of ~~pixel units~~ pixels having different separation directions of ~~[[said]]~~ the first and second photoelectric conversion ~~[[units]]~~ portions.

Claim 3 (withdrawn): An apparatus according to claim 1, wherein ~~[[said]] the plurality of pixel units~~ pixels includes at least two types of ~~pixel units~~ pixels having different sensitivity regions.

Claim 4 (currently amended): An apparatus according to claim 1, wherein the first and second sensitive areas are formed based on ~~the basis of~~ an F-number of the imaging optical system in detection of focus.

Claim 5 (withdrawn): An apparatus according to claim 1, wherein each of the ~~pixel units~~ plurality of pixels has a common amplification element adapted to amplify and output a signal from the first photoelectric conversion ~~[[unit]]~~ portion and a signal from the second photoelectric conversion ~~[[unit]]~~ portion, a first transfer switch adapted to transfer the signal from ~~[[said]] the~~ first photoelectric conversion unit to ~~[[said]] the~~ common amplification element, and a second transfer switch adapted to transfer the signal from ~~[[said]] the~~ second photoelectric conversion ~~[[unit]]~~ portion to ~~[[said]] the~~ common amplification element.

Claim 6 (withdrawn): An apparatus according to claim 5, further comprising a drive circuit adapted to control a first mode in which the signals from ~~[[said]] the~~ first and second photoelectric conversion ~~[[units]]~~ portions are added by an input unit of ~~[[said]] the~~ common amplification element and output, and a second mode in which the signals ~~[[said]] from~~ the first and second photoelectric conversion ~~[[units]]~~ portions are independently output from ~~[[said]] the~~ common amplification element.

Claim 7 (withdrawn): An apparatus according to claim 1, further comprising

an A/D conversion circuit adapted to convert a signal from the image pickup element into a digital signal, and

a digital signal processing circuit adapted to process the signal from [[said]] the A/D conversion circuit.

Claim 8 (withdrawn): An image pickup apparatus comprising:

a first semiconductor region having a first conductivity type;

a second semiconductor region formed in [[said]] the first semiconductor region and having a second conductivity type different from the first conductivity type;

a third semiconductor region formed in [[said]] the first semiconductor region and having the second conductivity type different from the first conductivity type, wherein [[said]] the second and third semiconductor regions are photoelectric conversion units formed adjacent to each other, and

a fourth semiconductor region having the first conductivity type [[is]] formed between [[said]] the second semiconductor region and [[said]] the first semiconductor region, wherein [[said]] the third semiconductor region is formed under an opening.

Claim 9 (withdrawn): An apparatus according to claim 8, wherein a common microlens is arranged over [[said]] the second and third semiconductor regions.

Claim 10 (withdrawn): An apparatus according to claim 8, further comprising

an A/D conversion circuit adapted to convert a signal from ~~[[said]]~~ the image pickup ~~element~~ apparatus into a digital signal, and

a digital signal processing circuit adapted to process the signal from ~~[[said]]~~ the A/D conversion circuit.

Claim 11 (withdrawn): An image pickup apparatus comprising:

a plurality of ~~pixel units~~ pixels each including a first photoelectric conversion unit for photoelectrically converting a first light component of a light beam that has been separated an exit pupil of an imaging optical system into a plurality of parts, and a second photoelectric conversion unit for photoelectrically converting a second light component different from the first light component; and

a processing circuit adapted to execute focus adjustment based on ~~the basis of~~ a first sensitivity distribution including a sensitivity distribution of the first photoelectric conversion unit and a second sensitivity distribution including a sensitivity distribution of the second photoelectric conversion unit, the first and second sensitivity distributions partially overlapping each other.

Claim 12 (withdrawn): An apparatus according to claim 11, further comprising

an A/D conversion circuit adapted to convert a signal from the image pickup ~~element~~ apparatus into a digital signal, and

a digital signal processing circuit adapted to process the signal from ~~[[said]]~~ the A/D conversion circuit.